

**WACKER**

**Wacker Chemie AG**  
Johannes-Hess-Strasse 24  
84489 Burghausen, Germany  
Tel. +49 8677 83-9341  
reinhard.hecht@wacker.com

## ***RoHS Compliance Confirmation***

The attached test report created by *Intertek Consumer Goods GmbH* confirms that Wacker's high-purity silicon complies with the limits as set by RoHS Directive 2011/65/EC including Directive 2015/863/EU.

The test results are valid for chips, chunks and rods.

**Intertek Consumer Goods GmbH:** <https://www.intertek.com>

**Test period:** November 4<sup>th</sup> – December 16<sup>th</sup>, 2019

Intertek Consumer Goods GmbH · Würzburger Straße 152 · 90766 Fürth · Germany

**Wacker Chemie AG**  
Johannes-Hess-Straße 24  
D – 84489 Burghausen  
Deutschland

Fürth, December 16, 2019

## TEST REPORT No. FUHLCP2019-10102-E2

Date sample received: November 04/2019  
Period of testing: November 07/2019 – November 27/2019  
Original test report: November 27/2019; Expanded test report: December 10/2019  
Expanded test report 2: December 16/2019  
Technical Director: Kerstin Scharrer

### Sample description: Clean Handled Polysilicon US



Sample No. 927828

### Conclusion based on tested item

Test order	Status
testing according to the RoHS directive 2011/65/EC including Directive (EU) 2015/863	pass <sup>*</sup>

<sup>\*</sup> Please see overview of the test results.

- Test results see next pages -

Intertek Consumer Goods GmbH  
Würzburger Straße 152  
90766 Fürth, Germany

Tel.: +49 911 74075 0  
Fax: +49 911 74075 30  
cg.germany@intertek.com

Sitz Fürth  
Amtsgericht Fürth, HRB 5756  
USt-IdNr. DE169317871

Geschäftsführer  
Reinhold Gehling



**Abbreviations:**

LOQ = Limit of quantification	nM = Non Metal
LOD = Limit of detection	M = Metal
n.d. = not determinable	cM = Composite sample
CS = Combined sample	BL = Below limit
* = Test method is not part of the accreditation scope	OL = Over limit
** = Outsourcing	X = Inconclusive
# = Subsequent delivery	σ = Standard deviation
n.a. = not applicable	

**List of component parts:**

Method: Disassembly, disjointment and mechanical sample preparation according to DIN EN 62321-2:2014-09

Sample No.	Part No.	Material	Description
927828	1	nM	Clean Handled Polysilicon US – high purity silicon

**Note:** Results were obtained by EDXRF for primary screening. Additional chemical testing using ICP (for Cd, Pb), AAS (for Hg), IC-UC/VIS (for CrVI) and GC/MS (for PBBs/PBDEs) are recommended, if the concentration exceeds the below warning value according to DIN EN 62321-3-1:2014-10.

Element	Unit	Non metal	Metal
Cd	mg / kg	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$
Pb	mg / kg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$
Hg	mg / kg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$
Br	mg / kg	$BL \leq (300-3\sigma) < X$	--
Cr	mg / kg	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$

Element	Unit	Composite material
Cd	mg / kg	$LOD < X < (150+3\sigma) \leq OL$
Pb	mg / kg	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	mg / kg	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	mg / kg	$BL \leq (250-3\sigma) < X$
Cr	mg / kg	$BL \leq (500-3\sigma) < X$

**1. XRF screening**

Method: XRF according to DIN EN 62321-3-1:2014-10\*

Sample No.	Part No.	Pb	Hg	Cd	Cr <sub>total</sub>	Br	Status
927828	1	BL	BL	BL	BL	BL	pass



## 2. Phthalates in mg/kg

Test method: 12.01.02.04\_Phthalate: 2018-11 / DIN EN 62321-8:2017-12 mod.  
LOQ: 50 mg/kg respectively as stated

Parameter	Abbrev.	CAS- No.	Sample No. 927828 Part No. 1
Diisobutylphthalate	DIBP	84-69-5	<50
Dibutylphthalate	DBP	84-74-2	<50
Benzylbutylphthalate	BBP	85-68-7	<50
Bis-(2-ethylhexyl)phthalate	DEHP	117-81-7	<50
<b>Status</b>	<b>Phthalate</b>		<b>pass</b>

Intertek Consumer Goods GmbH



Projektmanager RFA - RoHS / Projectmanager XRF - RoHS

Alexander Pecher

### Revision history

Page	Type of change
1	Images digitally edited from colour photos to black and white photos
1	Images were reduced from 2 to 1 image
2	Sample description in list of component parts was changed: silver was deleted

### General note:

This report has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Intertek being obtained. Intertek accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm his agreement to indemnify Intertek for all loss or damage resulting therefrom. Intertek accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.

We would like to point out, that Intertek can't provide legally binding assessments referring to isolated cases. The individual legal advice in Germany is reserved to the legal advisory professions and a binding interpretation is subject to the court of justice.

Copying excerpts or otherwise reproducing parts of the test report is permitted only with the consent of the laboratory accepting the order. This report pertains only to the test item(s).

All testing requests are subject to our Terms and Conditions available on [www.intertek.com](http://www.intertek.com).

End of report